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C. REMARKS

Status of the Claims

Claims 1-3, 5-10, 12-16, and 18-21 are currently present in the Application, and claims 1, 8, 14, and 21 are independent claims. Claims 1, 8, and 14 have been amended. Independent claim 21 has been added, and no claims have been cancelled.

Examiner Interview

Applicant notes with appreciation the telephonic interview conducted between Applicant's representative, the Examiner, and Primary Examiner Kahatrie on May 18, 2005. During the telephonic interview, the Examiner, the Primary Examiner, and Applicant's representative discussed some of the 103 references (Isip, U.S. Patent No. 6,189,010, Micka et al., U.S. Patent No. 5,592,618, and Brodersen et al., U.S. Patent No. 6,446,089). Regarding Applicant's independent claims, Applicant's representative discussed that Isip teaches a preference to testing code on an "exception table" as opposed to an entire database, and that combining Rosenzweig with Isip still does not teach or suggest testing a database in its entirety and determining whether the testing was successful as claimed by Applicant.

In addition, regarding Applicant's claim 5, Applicant's representative discussed that Micka teaches a copy validation technique and verifies that an entire file is copied, but never verifies a "number of changed records" as claimed by Applicant. The Examiner stated that he saw Applicant's representative's point, and that the fact that Applicant verifies a number of changed records may "invalidate" the Office Action's rejection.

Furthermore, regarding Applicant's claim 6, Applicant's representative discussed that Brodersen never checks whether a

PATENT

database is changed correctly and restores an original database if the database was not changed correctly. Rather, Brodersen teaches that a write operation is committed in case a database is rolled back due to a software or hardware failure, but Brodersen never teaches or suggests rolling back the database based upon whether it was updated correctly as claimed by Applicant. The Examiner stated that he saw Applicant's representative's point, but would not agree that Applicant's claim 6 reads over the art of record.

While no agreement was reached regarding the claims, Applicant respectfully submits that, as explained in further detail below, independent claims 1, 8, and 14 as amended place these claims and their respective dependent claims in condition for allowance. In addition, Applicant has added claim 21 in this response, which includes limitations of claim 1, claim 5, and claim 6.

Claim Rejections - Alleged Obviousness Under 35 U.S.C. § 103**Isip in view of Rosenzweig**

Claims 1, 7-8, 14, and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Isip (U.S. Pat. No. 6,189,010, hereinafter "Isip") in view of Rosenzweig et al. (U.S. Pat. No. 6,081,810, hereinafter "Rosenzweig"). Applicant respectfully traverses these rejections.

Applicant asserts that the Office Action fails to establish a prima facie case of obviousness under § 103 as set forth in § 103 and the MPEP. MPEP 2142 states that:

"To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references

PATENT

themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure."

Applicant asserts that the Office Action fails to show that the prior art references teach or suggest all of Applicant's claim limitations. In particular, Applicant asserts that the Office Action fails to view Applicant's invention as a "whole." MPEP 2141 states that "When applying 35 U.S.C. 103, the following tenets of patent law must be adhered to: (A) The claimed invention must be considered as a whole..."

MPEP 2143.03 states:

"To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art...All words in a claim must be considered in judging the patentability of that claim against the prior art" (emphasis added)

Applicant asserts that the Office Action fails to consider all words in Applicant's claims as a whole during their patentability judgment, which is described in greater detail below.

Applicant also asserts that the rejection uses impermissible hindsight in concluding that Applicant's claims are obvious. As stated in MPEP § 2145:

PATENT

"Applicants may argue that the examiner's conclusion of obviousness is based on improper hindsight reasoning. However, "[a]ny judgment on obviousness is in a sense necessarily a reconstruction based on hindsight knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and does not include knowledge gleaned only from applicant's disclosure, such a reconstruction is proper." In re McLaughlin, 443 F.2d 1392, 1395, 170 USPQ 209, 212 (CCPA 1971)."

Applicant asserts that the rejection combines portions of references based upon on knowledge gleaned only from Applicant's disclosure in contravention of MPEP § 2145.

Applicant has amended the independent claims that are directed to "processing database code" with limitations comprising:

- copying an actual database, the copying resulting in an erroneous database;
- retrieving a SPUFI code that corresponds to the actual database;
- testing the SPUFI code using the erroneous database;
- determining whether the testing is successful; and
- updating the actual database using the SPUFI code based on the determining, the updating creating a changed database.

When viewed as a whole, Applicant claims the steps of 1) copying a database, 2) testing SPUFI code using the copied database, 3) determining whether the testing on the copied database is successful, and 4) updating the original database using the SPUFI code based on whether the testing was successful. In contrast, ISIP teaches away from determining

PATENT

whether testing on an entire database (erroneous database) is successful. First, Isip states:

"Although the method for repairing constraint violations according to an embodiment of the present invention can be implemented as a stand-alone utility..., certain advantages are obtained by including the present invention as part of a CHECK utility" (col. 14, lines 24-28, emphasis added)

The above statement conveys that Isip prefers to incorporate his invention into a CHECK utility. Isip proceeds to state that:

"In another embodiment of the method for repairing constraint violations according to the present invention, an exception table is used. As is known in the art, an exception table is generated prior to each time a CHECK utility operates upon a table...The exception table only contains the rows including a constraint violation." (col. 14, lines 51-63, emphasis added)

The above statement conveys that by adhering to Isip's preferred embodiment, that an exception table is produced. Isip then discusses a preference for using the exception table to test SPUFI code, in that:

"Applying the UPDATE statements against the rows in the exception table minimizes the number of changes applied to the database table and provides an opportunity for the user to verify that the proper corrections have been made to each row. (col. 15, lines 21-24)

As can be seen above, Isip teaches a preference to test SPUFI code on an exception table for the fact that a user is able to verify the database changes. Again, Isip teaches either

PATENT

applying SPUFI code to an actual database or applying SPUFI code to an exception table, but never teaches or suggests applying SPUFI code to an erroneous (copied) database. As can be seen from the above discussion, Isip clearly prefers applying SPUFI code to an exception table instead of an entire database in order to verify database changes. Therefore, the Office Action uses impermissible hindsight in order to combine Rosenzweig with Isip because the combination contradicts Isip's teaching.

Furthermore, regarding the fifth element of claim 1, when the testing is deemed successful on the erroneous database, Applicant uses the SPUFI code to update the actual database. In contrast, Isip does not use the SPUFI code again to update an actual database, but merely replaces rows in the actual database with rows in the exception table that have been changed by the SPUFI code. Isip states:

"Once the user is satisfied that the proper corrections have been made to the rows in the exception table, then the corrected rows can be inserted into the database table."
(col. 15, lines 24-26)

As can be seen, and taking Applicant's claim as a whole, Isip never teaches or suggests using the SPUFI code to update the actual database based upon determining that testing SPUFI code was successful on an erroneous database as claimed by Applicant. The Office Action does not suggest that Rosenzweig teaches such limitation, and indeed it does not.

Therefore, since neither Isip nor Rosenzweig teach or suggest, in whole or in part, all of the limitations included in Applicant's amended claim 1, amended claim 1 is allowable over Isip in view of Rosenzweig. Claim 8 is an information handling claim including the same limitations of claim 1 and, therefore,

Docket No. AUS920010989US1

Page 13 of 18
Kliewe - 10/005,140

Atty Ref. No. IBM-1053

PATENT

is allowable for the same reason as claim 1. Claim 14 is a computer program product claim including the same limitations of claim 1 and, therefore, is allowable for the same reason as claim 1.

Each of the remaining claims 7 and 20 each depend on allowable independent claims 1 and 14, respectively. Therefore, claims 7 and 20 are also allowable for at least the same reasons that their respective independent claims are allowable.

Isip in view of Rosenzweig and further in view of Micka

Claims 5, 12, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Isip in view of Rosenzweig and further in view of Micka et al. (U.S. Pat. No. 5,592,618, hereinafter "Micka"). Applicant respectfully traverses these rejections.

Notwithstanding the fact that claim 5 is dependent upon claim 1 and therefore allowable for the same reasons as claim 1 above, claim 5 adds the limitations to claim 1 of:

- registering a request record change quantity, the request record change quantity corresponding to a number of expected changed records;
- identifying an actual record change quantity, the actual record change quantity corresponding to a number of actual changed records; and
- comparing the request record change quantity to the actual record change quantity.

Applicant's invention determines whether testing was successful by comparing the number of database records that actually changed with a number of database records that should change. In contrast, and as discussed with the Examiner, Micka teaches copying an entire database and never teaches or suggests

PATENT

copying portions of a database. As such, Micka never teaches or suggests determining whether testing was successful by comparing the number of database records that actually changed with a number of database records that should change as claimed by Applicant. The Office Action does not suggest that Isip or Rosenzweig teach such limitation, and indeed they do not.

Therefore, since Isip, Rosenzweig, or Micka do not teach or suggest, in whole or in part, all the limitations of Applicant's claim 5, claim 5 is allowable over Isip in view of Rosenzweig and further in view of Micka. Claim 12 is an information handling claim including the same limitations of claim 5 and, therefore, is allowable for the same reason as claim 5. Claim 18 is a computer program product claim including the same limitations of claim 5 and, therefore, is allowable for the same reason as claim 5.

Isip in view of Rosenzweig and further in view of Brodersen

Claims 6, 13, and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Isip in view of Rosenzweig and further in view of Brodersen et al. (hereinafter "Brodersen"). Applicant respectfully traverses these rejections. As a note, the Office Action states that Brodersen is U.S. Patent No. 6,189,010 but, based upon the Office Action's Notice of References Cited, Applicant assumes that Brodersen is actually U.S. Patent No. 6,446,089.

Notwithstanding the fact that claim 6 is dependent upon claim 1 and therefore allowable for the same reasons as claim 1 above, claim 6 adds the limitations to claim 1 of:

- checking the changed database for correctness; and

PATENT

- restoring the actual database in response to the checking.

Applicant restores the actual database if the SPUFI code does not correctly change the database. In contrast, and as discussed with the Examiner, Brodersen never teaches such limitations. Rather, Brodersen commits a write operation to a database in the event that the database is rolled back due to a software or hardware failure. Specifically, Brodersen states that:

"The foregoing description of the update processing preferably includes additional steps not material to the present invention, for example,...to stage and commit the write to the database to allow for rollback in the event of software or hardware failure..." (col. 7, line 66 - col. 8, line 4, emphasis added)

As can be seen, and taking Applicant's claim as a whole, Brodersen never teaches or suggests "checking the changed database for correctness and restoring the actual database in response to the checking" as claimed by Applicant. The Office Action does not suggest that Isip or Rosenzweig teach such limitations, and indeed they do not.

Therefore, since Isip, Rosenzweig, or Brodersen do not teach or suggest, in whole or in part, all the limitations of Applicant's claim 6, claim 6 is allowable over Isip in view of Rosenzweig and further in view of Brodersen. Claim 13 is an information handling claim including the same limitations of claim 6 and, therefore, is allowable for the same reason as claim 6. Claim 19 is a computer program product claim including the same limitations of claim 6 and, therefore, is allowable for the same reason as claim 6.

PATENT**Isip in view of Rosenzweig and further in view of Lloyd**

Claims 2, 9, and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Isip in view of Rosenzweig and further in view of Lloyd (U.S. Pat. No. 6,460,041, hereinafter "Lloyd"). Applicant respectfully traverses these rejections.

Claims 2, 9, and 15 each depend on allowable independent claims 1, 8, and 14, respectively. Therefore, claims 2, 9, and 15 are also allowable for at least the same reasons that their respective independent claims are allowable.

Isip in view of Rosenzweig, Lloyd, and further in view of Nakano

Claims 3, 10, and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Isip in view of Rosenzweig in view of Lloyd and further in view of Nakano et al. (U.S. Pat. No. 6,505,212, hereinafter "Nakano"). Applicant respectfully traverses these rejections.

Claims 3, 10, and 16 each depend indirectly on allowable independent claims 1, 8, and 14, respectively. Therefore, claims 3, 10, and 16 are also allowable for at least the same reasons that their respective independent claims are allowable.

New Claim 21

Applicant has added new method claim 21 in this response. Claim 21 includes the same limitations of claim 1, claim 5, and claim 6 and, therefore, is allowable for at least the same reason as claim 1, claim 5, and claim 6 discussed above.

Conclusion

As a result of the foregoing, it is asserted by Applicant that the remaining claims in the Application are in condition


PATENT

for allowance, and Applicant respectfully requests an early allowance of such claims.

Applicant respectfully requests that the Examiner contact the Applicant's attorney listed below if the Examiner believes that such a discussion would be helpful in resolving any remaining questions or issues related to this Application.

Respectfully submitted,

By


Leslie A. Van Leeuwen, Reg. No. 42,196
Joseph T. Van Leeuwen, Reg. No. 44,383
Van Leeuwen & Van Leeuwen
Attorneys for Applicant
Telephone: (512) 301-6738
Facsimile: (512) 301-6742